UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,581	08/17/2001	Mamoru Takikita	Q65636	7222

7590 09/07/2006

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER
HASHEM, LISA

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3 and 4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3, 4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some *   c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

FINAL DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando

in view of Hassett.

Regarding claim 1, Ando discloses a narrow band communication vehicle-mounted

apparatus or mobile device (Fig. 2, 1) comprising (see Abstract;):

a radio-communication portion (Fig. 1, 9) for sending and receiving with an on-road device or

immobile device (Fig. 2, 2) via an antenna (Fig. 2, 6) (col. 1, lines 19-27; col. 3, lines 54-63),

a control microcomputer (Fig. 2, 7) for controlling various equipment and a nonvolatile memory

(Fig. 2, 8) (col. 3, lines 54-63),

wherein said control microcomputer inherently stores in said nonvolatile memory randomly

generated communication registration identification data (LID; col. 1, lines 41-49) when

communication is opened or when said apparatus starts up (Fig. 6: Start, 100; Fig. 7; col. 5, lines

21-31 and lines 41-43), and

communication is performed using communication registration identification data stored in said

nonvolatile memory in a case where said apparatus is in a communication range

when said apparatus starts up (col. 5, lines 21-55; col. 6, lines 10-22; col. 7, lines 55-63).

Examiner bases inherency because Ando only teaches one (ROM/RAM) memory in the mobile device and since there is only one memory device the randomly generated communication registration identification data must be stored there.

Ando discloses the apparatus in a communication range when said apparatus starts up. However, Ando does not disclose a field intensity measuring portion for detecting a radio field intensity and communication is performed where said radio field intensity is in a communication range.

Hassett discloses a narrow band communication vehicle-mounted apparatus or in-vehicle component (IVC) (see Abstract; Fig. 2, 16) inherently comprising (col. 12, lines 34-46): a radio-communication portion for sending and receiving with an on-road device (Fig. 2, 18) via an antenna (Fig. 14A, 73), a field intensity measuring portion for detecting a radio field intensity (Fig. 14A, 76), a control microcomputer for inherently controlling various equipment (Fig. 14A, 70), and a nonvolatile memory (Fig. 14A, 88) (col. 8, lines 24-53), wherein said apparatus receives communication registration identification data (new T1 signal) when communication is opened or when said apparatus starts up (when receiving this new T1 signal) (col. 8, lines 35-48; col. 15, lines 7-22), and communication is performed using communication registration identification data received in a case where said radio field intensity is in a communication range when said apparatus starts up (when vehicle decides to exit an upcoming ramp and the apparatus receives a T1 signal data) (col. 14, lines 19-56; col. 14, line 65 - col. 15, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Andos to include a field intensity measuring portion for

detecting a radio field intensity and communication is performed where said radio field intensity

is in a communication range as taught by Hassett. One of ordinary skill in the art would have

been lead to make such a modification to include a field intensity measuring portion that detects

radio field intensity and a radio field intensity that permits communication.

Regarding claim 3, the narrow band communication vehicle-mounted apparatus

according to claim 1, wherein Andos further discloses said randomly generated communication

registration identification data relates to an identification of the narrow band communication

vehicle-mounted apparatus (col. 1, lines 41-49; col. 1, lines 59-67; col. 3, lines 35-39).

Regarding claim 4, the narrow band communication vehicle-mounted apparatus

according to claim 1, wherein Andos further discloses said control microcomputer (CPU) stores

in said nonvolatile memory randomly generated communication registration identification data

(LID; Fig. 6, 100) only when said apparatus starts up (Fig. 6, START; mobile device executes

the LID check processing immediately after entering the communication service area A) (col. 5,

lines 21-31).

Response to Arguments

3.   In response to Applicant's remarks that Ando does not teach 'said control microcomputer

stores in said nonvolatile memory randomly generated communication registration identification

data when communication is opened or when said apparatus starts up'. Examiner disagrees.

Examiner interprets the term 'nonvolatile memory' to mean a ROM (read-only memory) that

contains or stores programs, information, and data that is being used by the device. The CPU

executes the LID check processing immediately after entering the communication service area A

and the LID that is generated must be stored in the ROM/RAM of the mobile device since it is

the only memory device of the mobile device and the ROM/RAM stores information or data. In col. 5, lines 41-43, Ando further states 'The mobile device 1 checks at step 400 whether its own LID is the same as those of other LIDs currently being used'. Therefore, the LID must be stored in order for this check processing to occur. Further, the LID must be stored in the ROM since the CPU executes communication processing and data processing based on programs (e.g. the LID check processing program) stored in the ROM (Fig. 6; col. 3, lines 54-61; col. 5, lines 21-43).

4.   Further, Applicant argues that Ando does not disclose 'wherein said control microcomputer stores in said nonvolatile memory randomly generated communication registration identification data only when said apparatus starts up'. Examiner disagrees. Ando discloses the mobile device starts up or executes the LID check processing when immediately after entering the communication service area A (Fig. 6; col. 5, lines 21-43) wherein the data must be stored in ROM because it is used later for LID check processing (col. 5, lines 41-43).

5.   The drawing objections cited in the Non-Final action filed on 3-16-06 are withdrawn

6.   Applicant's arguments filed 6-16-2006 on claims 1, 3, and 4 have been fully considered but they are not persuasive. Please see all rejection(s) above.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Please see PTO-892 form.

9.   Any response to this action should be mailed to:

> Commissioner for Patents
> P.O. Box 1450
> Alexandria, VA 22313-1450

Or faxed to:

> (571) 273-8300 (for formal communications intended for entry)

Or call:

> (571) 272-2600 (for customer service assistance)

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lisa Hashem whose telephone number is (571) 272-7542. The

examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or

relating to the status of this application or proceeding should be directed to the Group

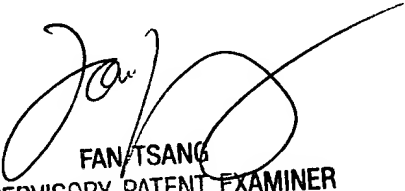receptionist whose telephone number is (571) 272-2600.

11.   Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lh
September 5, 2006

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600